(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 31 March 2005 (31.03.2005)

PCT

(10) International Publication Number WO 2005/029481 A1

(51) International Patent Classification7:

G11B 7/13

(21) International Application Number:

PCT/KR2003/002169

(22) International Filing Date: 17 October 2003 (17.10.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 10-2003-0065382

20 September 2003 (20.09.2003) KR

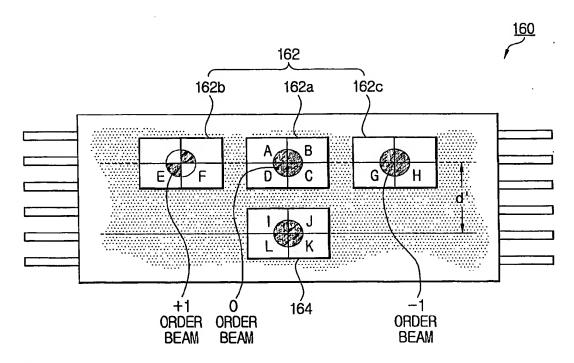
- (71) Applicant (for all designated States except US): SAM-SUNG ELECTRONICS CO., LTD. [KR/KR]; 416, Maetan-dong, Paldal-gu, Suwon-city, 442-370 Gyunggi-do (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): PARK, Soo-han [KR/KR]; 511-901, Jinsan-maeul Samsung 5th Apartment,

1161, Bojeong-ri, Guseong-myeon, Yongin-city, 449-913 Gyunggi-do (KR). **KIM, Jong-uk** [KR/KR]; 301, Hyundai Haitz Villa, 435-66, Singal-ri, Giheung-eup, Yongin-city, 449-597 Gyunggi-do (KR).

- (74) Agent: JEONG, Hong-sik; 8Fl., Daelim Bldg., 1600-3, Seocho-dong, Seocho-gu, 137-877 Seoul (KR).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: PHOTO DIODE IC



(57) Abstract: A photo diode for a laser diode of two wavelenghts is disclosed. According to the present invention, a 12-sectioned photo diode is provided to detect a DVD laser beam and CD laser beam, respectively, and as a result, the laser diode of two wavelenghts is well adapted for use in an optical pick-up.



WO 2005/029481 A1



Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.